

Claims

- [c1] 1.A method for managing electrical schematic data comprising:
 creating a logical schematic for a part;
 creating a layout schematic for said part;
 creating a physical schematic for said part;
 associating said logical schematic, said layout schematic and said physical schematic together to form a part master file;
 storing said part master file on a computer network;
 providing access to said part master file to a plurality of user locations; and
 controlling modification of said part master file, whereby said controlling comprises allowing only one of said plurality of user locations to modify said part master file at a time.
- [c2] 2.The method of claim 1, wherein said part master file further comprises a schematic image file based on said logical schematic, said layout schematic, and said physical schematic.
- [c3] 3.The method of claim 1, further comprising the steps of modifying said part master file and tracking a modification to said part master file.
- [c4] 4.The method of claim 3, wherein said tracking comprises storing a revised part master file.
- [c5] 5.The method of claim 3, further comprising the step of notifying an interested user location of said modifying.
- [c6] 6.The method of claim 1, wherein said plurality of user locations comprises at least one remote user location.
- [c7] 7.The method of claim 1, further comprising the step of storing a pointer in said part master file, said pointer being capable of indicating a storage location of said logical schematic, said physical schematic and said layout schematic.
- [c8] 8.The method of claim 1, wherein said associating is accomplished by a computer software program.

- [c9] 9.The method of claim 1, further comprising the steps of creating a second logical schematic for a sub-part, creating a second physical schematic for said sub-part, creating a second layout schematic for said sub-part, associating said second logical schematic, said second physical schematic and said second layout schematic together to form a sub-part master file, and storing said sub-part master file in said part master file.
- [c10] 10.The method of claim 9, further comprising the step of controlling modification of said sub-part master file, allowing only one of said plurality of user locations to modify said sub-part master file at a time.
- [c11] 11.A system for managing electrical schematic data comprising:
a computer;
at least one computer aided engineering (CAE) software program, said at least one CAE software program being capable of creating a logical schematic, a layout schematic, and a physical schematic for a part based on an input into said computer from a user;
a computer schematic management utility, said computer schematic management utility being capable of associating said logical schematic, said layout schematic and said physical schematic together to form a part master file; and
a computer network, said computer network comprising said computer and a plurality of user locations, said computer network being capable of storing said part master file and providing access to said part master file to said plurality of user locations;
whereby said computer schematic management utility controls modification of said part master file stored on said computer network.
- [c12] 12.The system of claim 11, wherein said computer schematic management utility controls modification of said part master file by allowing only one of said plurality of user locations to modify said part master file at a time.
- [c13] 13.The system of claim 11, wherein said part master file further comprises a schematic image file based on said logical schematic, said physical schematic, and said layout schematic.

- [c14] 14.The system of claim 11, wherein said computer schematic management utility is further capable of tracking a modification of said part master file.
- [c15] 15.The system of claim 14, wherein said tracking comprises storing a revised part master file.
- [c16] 16.The system of claim 11, further comprising an interested user list, wherein said computer schematic management utility generates a notification to said interested user list when said part master file is modified.
- [c17] 17.The system of claim 16, wherein said notification comprises an electronic message.
- [c18] 18.The system of claim 11, wherein said plurality of user locations comprises at least one remote user location.
- [c19] 19.A method for managing electrical schematic data comprising:
creating a logical schematic for a part with a first computer aided design tool;
creating a layout schematic for said part based on said logical schematic with a second computer aided design tool;
creating a physical schematic for said part based on said logical schematic and said layout schematic with a third computer aided design tool;
associating said logical schematic, said layout schematic and said physical schematic together to form a part master file, said associating comprising storing said logical schematic, said layout schematic, and said physical schematic in a single file;
storing said part master file on a computer network;
providing access to said part master file to a plurality of user locations; and
controlling modification of said part master file, whereby said controlling comprises allowing only one of said plurality of user locations to modify said part master file at a time.
- [c20] 20.The method of claim 19, wherein said part master file further comprises a schematic image file based on said logical schematic, said layout schematic, and said physical schematic.

- [c21] 21.The method of claim 19, further comprising the steps of modifying said part master file and tracking a modification to said part master file.
- [c22] 22.The method of claim 21, wherein said tracking comprises storing a revised part master file.
- [c23] 23.The method of claim 21, further comprising the step of notifying an interested user location of said modifying.
- [c24] 24.The method of claim 19, wherein said plurality of user locations comprises at least one remote user location.